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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,403	03/31/2004	Ming C. Hao	200316184-1	5385

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EXAMINER
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CHU, DAVID H

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/814,403

Applicant(s)

HAO ET AL.

Examiner

David H. Chu

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to: See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: The specification of the application is missing a summary of the invention.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

#### **Claim 23 rejected under 35 U.S.C. 101 because:**

The claimed invention is directed to non-statutory subject matter. Claim 23 recites a computer program. It is suggested that the preamble be amended to recite --A computer program stored on a computer readable medium and executed by the computer for providing a graphical representation to be displayed, comprising: --.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**4. Claims 1-9, 14-17 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tittle (US 6,603,477) in view of Meier (US 6,211,887). Tittle discloses a process control device that plots traces of multiple graphs.**

Note with respect to claim 1, 14, 20 and 23, Tittle teaches that the process control device acts as a means to “abstract/determine plurality of parameters” that relates to a “dynamic” (see column 4, line 14-22). FIG 2 shows the parameters being “defined” as Time, and unit axes X and Y.

Note with respect to claim 2 of the applicant, starting nodes of traces T1 – T7 (shown in FIG 2) are in “alphanumerical order” on unit axes W and Y.

Note with respect to claims 3 and 15, the teachings of Tittle shows that each plotted trace of T1-T7 are plotted in chronological “order” of the horizontal axis 12 (FIG 1), where time is the “associated data value.”

Note with respect to claims 4, 5, 17 and 22, the teachings of Tittle shows that each trace are “spaced” according to the observed trace value on the vertical axes W, X, Y, Z (FIG 1). Trace with higher value is spaced higher in the vertical axes, which is the equivalent to “providing more space for nodes with higher data value.”

Note with respect to claims 7, 16 and 21, it is clear that each plot on traces T1-T7 are given a trace value that correspond to the vertical axes W, X, Y, Z (FIG 1) and are "ordered" against time 12 (FIG 1). The provision of a trace value through observation is the equivalent to "assigning weight."

Note with respect to claims 8 and 9, the teachings of Tittle that correspond to the claims 3-5, 7, 15-17, 21 and 22 clearly show that the combination of "assigning weight" and "spacing the nodes to the weight" is inherent.

Note with respect to claim 6 of the applicant, the traces T1-T7 are lines connected in "piece-wise" fashion.

However, Tittle does not disclose expressly that the nodes to be graphically connected on the plurality of partitions. Further, Tittle does not expressly teach the use of a computer system and program.

Meier, the same field of endeavor, discloses a system/method/apparatus for data visualization that have nodes 150 plotted on plurality of partitions 130 which are graphically connected 160, best shown in FIG2.

Therefore, at the time of invention, it would have been obvious to one of an ordinary skill of the art to modify Tittle to graphically connect nodes that are mapped on the partitions as suggested by the teachings of Meier to observe correlations between data points more easily.

**5. Claims 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tittle in view of Meier as applied to claims 1-9, 14-17 and 20-23 above, and further in view of Yonts (US 6,590,577).**

Tittle does not disclose expressly the use of "real time animation" for graphical representation of data. The teachings of Yonts, shows a dynamic display that generates charts using an algorithm to smooth the display. Based on the algorithm and number of points between the starting and ending charts, then the intermediate charts are displayed successively, displaying an "animation" effect (see column 3, line 39-44 and column 3, line 17-28).

Therefore, at the time of invention, it would have been obvious to one of ordinary skill in the art to apply the smoothing algorithm as suggested by the teachings of Yonts to the method/system/apparatus of Tittle to observe changes over time.

**6. Claims 11, 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tittle in view of Meier as applied to claim 1-9, 14-17 and 20-23 above, and further in view of Bertram (US 6,144,379).**

Tittle does not disclose expressly an "auto-linking" feature of the indicia or nodes. Bertram discloses an interactive display controlled by a data processor that shows a distribution of parameter monitored over a selected time period, best shown in FIG4. The display contains server icons 90 (FIG 4) that operate as "links" that generate a separate window 101 (FIG4) with the relevant graph. The new graph contains "nodes" that also act as links to relevant graphs. Therefore, at the time of invention, it would

have been obvious to one of ordinary skill in the art to apply the "auto-link" feature as suggested by the teachings of Bertram to the nodes and indicia in the method/system/apparatus of Tittle to enable users to easily navigate through multiple graphs or obtain additional information via the separate windows.

**7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tittle in view of Meier as applied to claim 1-9, 14-17 and 20-23 above, and further in view of Dehner, Jr. (US 6,429,868).**

Tittle does not disclose expressly indicia that "fade." Dehner, Jr. discloses an interactive display system that utilizes a feature that hides specified number ranges or colors. The color of the data is set to the background color to be hidden. Therefore, at the time of invention, it would have been obvious to one of ordinary skill in the art to apply the teachings of Dehner, Jr. to the indicia of Tittle to allow a user to customize the view of data as selected by the user.

### ***Conclusion***

**8. Takasaki et al. (US 5,757,356) discloses an Input data display device that has nodes Pa and Pb plotted on a plurality of partitions A, B and C (FIG 3).**


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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Chu whose telephone number is (571) 272-8079. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DHC

  
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2/2/06